

What is claimed is:

1. A method of formulating an insulin composition comprising:
preparing a carrier having a phosphatidylcholine component; and
mixing an insulin solution into said carrier to entrap said insulin within said carrier,
wherein said insulin is stabilized at room temperature.
2. The method of claim 1, wherein preparing said carrier comprises:
combining a polyglycol 200 and polyglycol 400 to form a polyglycol mixture;
shaving said phosphatidylcholine component into said polyglycol mixture to form a phosphatidylcholine solution; and
mixing said phosphatidylcholine solution until said phosphatidylcholine solution is clear.
3. The method of claim 2, wherein said phosphatidylcholine component is polyenylphosphatidylcholine-enriched phosphatidylcholine.
4. The method of claim 2, wherein said phosphatidylcholine solution comprises 45% w/w phosphatidylcholine, 50% w/w polyglycol E200, and 5% w/w polyglycol E400.
5. The method of claim 4, wherein preparing said carrier further comprises
warming said phosphatidylcholine solution to 40°C and milling said warmed solution;
combining a surfactant and a lubricant to form a fluid;
adding said fluid to said warmed solution carrier and milling until said solution is clear;

adding methyl paraben to said solution and milling until said methyl paraben dissolves in said solution;

warming water to 40°C and adding said warmed water slowly to said solution; and

ceasing milling of said solution and sweeping said solution to cool to room temperature.

6. The method of claim 5, wherein said carrier comprises 53.25% w/w phosphatidylcholine solution, 1.00% w/w surfactant, 1.00% w/w lubricant, 0.75% w/w methyl paraben, and 44.00% w/w water.

7. The method of claim 5, wherein said surfactant is a siloxylated polyether.

8. The method of claim 7, wherein said wherein said siloxylated polyether is dimethyl, methyl(propylpolyethylene oxide propylene oxide, acetate) siloxane.

9. The method of claim 5, wherein said lubricant is silicone fluid.

10. The method of claim 9, wherein said silicone fluid contains low viscosity polydimethylsiloxane polymers.

11. The method of claim 1, wherein said insulin solution is human recombinant insulin prepared in 0.01 N HCl.

12. The method of claim 11, wherein said insulin is prepared in 0.01 N HCl at 50 mg/ml.

13. The method of claim 1, said insulin solution is mixed into said carrier at room temperature for at least one hour.

14. The method of claim 1, said insulin solution is mixed into said carrier to obtain said insulin composition having a concentration of 20 mg/ml.